



УНИВЕРЗИТЕТ У БАЊОЈ ЛУЦИ
UNIVERSITY OF BANJA LUKA
ПРИРОДНО-МАТЕМАТИЧКИ ФАКУЛТЕТ
FACULTY OF NATURAL SCIENCES AND MATHEMATICS



CHEMISTRY DEPARTMENT

PhD STUDIES

Course name	Selected Topics in Environmental Protection			
Course code	Course status	Semester	Hours of instruction	ECTS
DHEM23OPS	elective	I, II, III or IV	5+0	10
Teacher(s)	Prof. Dušica Pešević, PhD			

Prerequisite course(s)	Entry requirements			
none	/			
Course goals				
Enabling students to fully understand the origin and behavior of pollutants in the environment, and their impact on ecosystems.				
Learning outcomes				
Application of knowledge and understanding of the most significant pollutants and sources of environmental pollution. Independent selection and application of chemical processes to protect and improve the environment.				
Course content				
Study of processes that lead to environmental pollution and processes that affect the fate of pollutants in the environment. Air quality and the impact of air pollution in the function of environmental protection and improvement; Point and diffuse pollution and surface water quality; Persistent organic pollutants and environmental impact; Management of polychlorinated biphenyls and other persistent organic pollutants; Properties of solid waste and impact on the environment; Hazardous waste management and environmental impact; Impact of landfills on the environment; Recycling of waste materials and sustainable use of resources.				
Teaching methods				
Lectures, seminar work, study research work, and consultations				
Books and other learning materials				
<ol style="list-style-type: none">1. D. Veselinović i sar.: Fizičko-hemijski osnovi zaštite životne sredine: Stanja i procesi u životnoj sredini, Fakultet za fizičku hemiju Univerziteta u Beogradu, 1995.2. Marković, D., Đarmati, Š., Gržetić, I., Veselinović, D.: Fizičko-hemijski osnovi zaštite životne sredine, knjiga 2, Izvori zagađivanja, posledice i zaštita, Univerzitet u Beogradu, Beograd, 1996.3. B. Jakšić, M. Ilić: Upravljanje opasnim otpadom, Urbanistički zavod Republike Srpske, Banja Luka, 2000.4. Todorović, I., Kaišarević, S.: Ekotoksikologija, PMF, Novi Sad, 2015.5. J. Đuković, V. Bojanić: Aerozagađenje, D.P. Institut zaštite i ekologije, Banja Luka, 2000. Supporting literature: <ol style="list-style-type: none">1. P. Jayarama Reddy: Municipal Solid Waste Management: Processing, Energy Recovery, Global Examples, BS Publications Leiden, The Netherlands: Distributed by CRC Press, 2011.2. B. Jakšić, M. Ilić, M. Balaban: Upravljanje medicinskim otpadom, Urbanistički zavod Republike Srpske, Banja Luka, 2001.3. Scientific and professional papers published in domestic and foreign scientific journals in this field.				
Course activities and grading method				
Pre-exam obligations	10			
Seminary work	30	Final exam	60	
Additional course notes				
Name of the teacher who prepared this form		Dušica Pešević		